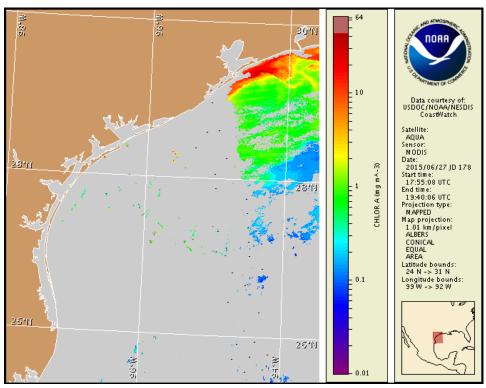


Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Texas Monday, 29 June 2015 NOAA National Ocean Service NOAA Satellite and Information Service NOAA National Weather Service

Last bulletin: Monday, June 22, 2015



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s), when applicable. Points represent cell concentration sampling data from June 19 to 24: red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). Cell count data are provided by Texas Parks and Wildlife Department. For a list of sample providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide:

http://tidesandcurrents.noaa.gov/hab/habfs_bulletin_guide.pdf

 $Detailed \ sample \ information \ can \ be \ obtained \ through \ the \ Texas \ Parks \ and \ Wildlife \ Department \ at: \ http://www.tpwd.state.tx.us./landwater/water/environconcerns/hab/redtide/status.phtml$

To see previous bulletins and forecasts for other Harmful Algal Bloom Bulletin regions, visit the NOAA Harmful Algal Bloom Operational Forecast System bulletin archive:

http://tidesandcurrents.noaa.gov/hab/bulletins.html

Conditions Report

Karenia brevis (commonly known as Texas red tide) ranges from not present to background concentrations along the coast of Texas. No respiratory irritation is expected Monday, June 29 through Monday, July 6.

Check http://tidesandcurrents.noaa.gov/hab/beach_conditions.html for recent, local observations.

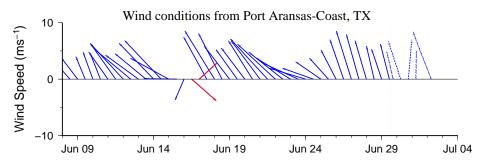
Analysis

Sampling from the Texas A&M University's Imaging FlowCytobot, located on the Port Aransas ship channel, indicates that *Karenia brevis* concentrations range between 'not present' and 'background' (TAMU; 6/22-6/29). For information on area shellfish restrictions, contact the Texas Department of State Health Services.

Recent MODIS Aqua imagery (6/27, shown left) is partially obscured by clouds alongand offshore the Texas coast from Galveston to the Rio Grande, limiting analysis. Elevated to very high chlorophyll (1 to >20 μ g/L) is visible along- and offshore the Texas coast from Sabine Pass to Galveston Island. Elevated chlorophyll is not indicative of the presence of *K. brevis* and is most likely due to the resuspension of benthic chlorophyll and sediments along the coast.

Forecast models based on predicted near-surface currents indicate a potential maximum transport of > 150km north from the Port Aransas region from June 29-July 2.

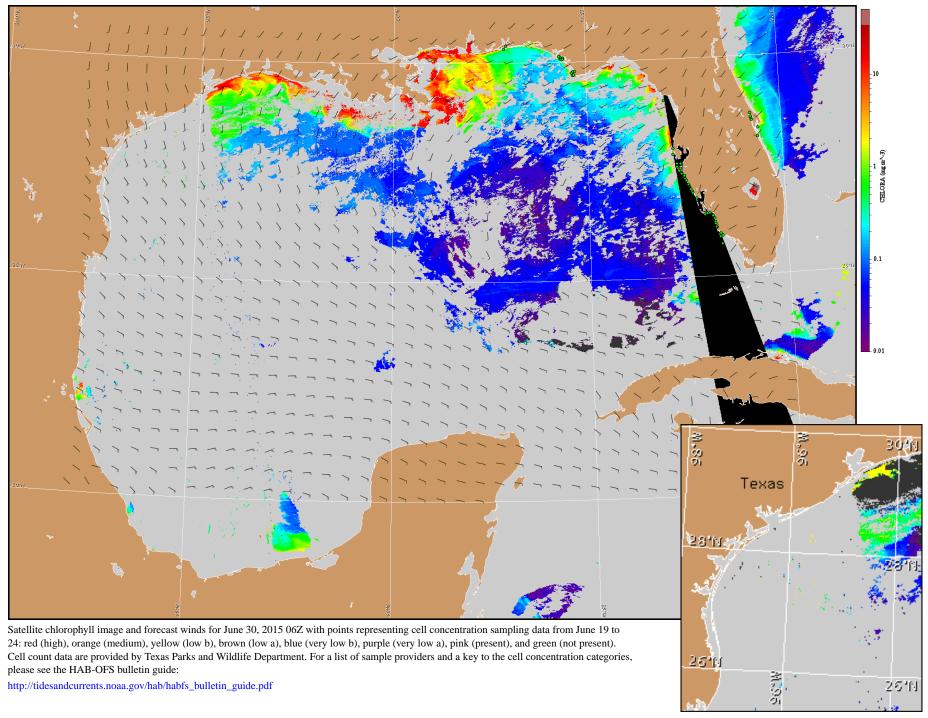
Lalime, Kavanaugh



Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts. Wind observation and forecast data provided by NOAA's National Weather Service (NWS).

Wind Analysis

Port Aransas: South to southeast winds (10-15kn, 5-8m/s) today through Friday.



Verified and suspected HAB areas shown in red. Other areas of high chlorophyll concentration shown in yellow (see p. 1 analysis for interpretation).